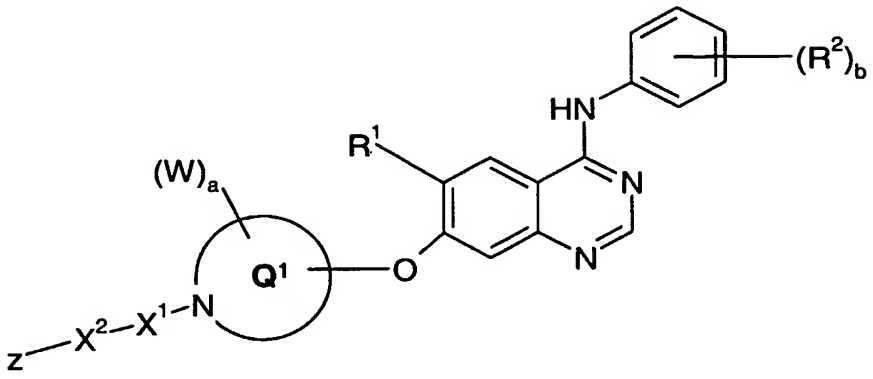
CLAIMS

1. A quinazoline derivative of the Formula I:



wherein:

R^1 is selected from hydrogen, hydroxy, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, or from a group of the formula :

$$Q^2-X^3-$$

wherein X^3 is a direct bond or is O, and Q^2 is (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein adjacent carbon atoms in any (2-6C)alkylene chain within a R^1 substituent are optionally separated by the insertion into the chain of a group selected from O, S, SO, SO_2, $N(R^3)$, CO, $CH(OR^3)$, $CON(R^3)$, $N(R^3)CO$, $SO_2N(R^3)$, $N(R^3)SO_2$, CH=CH and C≡C wherein R^3 is hydrogen or (1-6C)alkyl,

and wherein any CH_2=CH- or HC≡C- group within a R^1 substituent optionally bears at the terminal CH_2= or HC≡ position a substituent selected from halogeno, carboxy, carbamoyl, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl and di-[(1-6C)alkyl]amino-(1-6C)alkyl or from a group of the formula :

$$Q^3-X^4-$$

wherein X^4 is a direct bond or is selected from CO and $N(R^4)CO$, wherein R^4 is hydrogen or (1-6C)alkyl, and Q^3 is heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein any CH_2 or CH_3 group within a R^1 substituent, other than a CH_2 group within a heterocyclyl ring, optionally bears on each said CH_2 or CH_3 group one or more halogeno or (1-6C)alkyl substituents or a substituent selected from hydroxy, cyano, amino,

carboxy, carbamoyl, sulfamoyl, oxo, thioxo, (1-6C)alkoxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulfamoyl, N,N-di-[(1-6C)alkyl]sulfamoyl, (1-6C)alkanesulfonylamino and N-(1-6C)alkyl-(1-6C)alkanesulfonylamino, or from a group of the formula:

$$-X^5-Q^4$$

wherein X^5 is a direct bond or is selected from O, S, SO, SO_2, $N(R^5)$, CO, $CH(OR^5)$, $CON(R^5)$, $N(R^5)CO$, $SO_2N(R^5)$, $N(R^5)SO_2$, $C(R^5)_2O$, $C(R^5)_2S$ and $C(R^5)_2N(R^5)$, wherein R^5 is hydrogen or (1-6C)alkyl, and Q^4 is (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears one or more substituents, which may be the same or different, selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, carboxy, carbamoyl, formyl, mercapto, sulfamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, N-(1-6C)alkylsulfamoyl, N,N-di-[(1-6C)alkyl]sulfamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulfamoyl, N,N-di-[(1-6C)alkyl]sulfamoyl, (1-6C)alkanesulfonylamino, and N-(1-6C)alkyl-(1-6C)alkanesulfonylamino, or from a group of the formula:

$$-X^6-R^6$$

wherein X^6 is a direct bond or is selected from O, $N(R^7)$ and C(O), wherein R^7 is hydrogen or (1-6C)alkyl, and R^6 is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, carboxy-(1-6C)alkyl, (1-6C)alkoxy-(1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl, (2-6C)alkanoylamino-(1-6C)alkyl, (1-6C)alkoxycarbonylamino-(1-6C)alkyl, carbamoyl-(1-6C)alkyl, N-(1-6C)alkylcarbamoyl-(1-6C)alkyl, N,N-di-[(1-6C)alkyl]carbamoyl-(1-6C)alkyl, (2-6C)alkanoyl-(1-6C)alkyl or (1-6C)alkoxycarbonyl-(1-6C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1 or 2 oxo or thioxo substituents;

b is 1, 2, 3, 4 or 5;

each R^2, which may be the same or different, is selected from halogeno, cyano, nitro, hydroxy, amino, carboxy, carbamoyl, sulfamoyl, trifluoromethyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulfamoyl, N,N-di-[(1-6C)alkyl]sulfamoyl, (1-6C)alkanesulfonylamino, N-(1-6C)alkyl-(1-6C)alkanesulfonylamino and a group of the formula :

$$-X^7-R^8$$

wherein X^7 is a direct bond or is selected from O and $N(R^9)$, wherein R^9 is hydrogen or (1-6C)alkyl, and R^8 is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkoxy-(1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl, (2-6C)alkanoylamino-(1-6C)alkyl or (1-6C)alkoxycarbonylamino-(1-6C)alkyl;

Q^1 is piperidinyl;

a is 0, 1, 2, 3 or 4;

each W, which may be the same or different, is selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, oxo, amino, formyl, mercapto, (1-6C)alkyl, (1-6C)alkoxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (2-6C)alkanoyl, (2-6C)alkanoyloxy and from a group of the formula:

$$-X^8-R^{10}$$

wherein X^8 is a direct bond or is selected from O, CO, SO_2 and $N(R^{11})$, wherein R^{11} is hydrogen or (1-6C)alkyl, and R^{10} is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkoxy-(1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, N-(1-6C)alkylamino-(1-6C)alkyl or N,N-di-[(1-6C)alkyl]amino-(1-6C)alkyl;

X^1 is selected from CO and SO_2;

X^2 is a group of the formula:

$$-(CR^{12}R^{13})_p-(Q^5)_m-(CR^{14}R^{15})_q-$$

wherein m is 0 or 1, p is 0, 1, 2, 3 or 4 and q is 0, 1, 2, 3 or 4,

each of R^{12}, R^{13}, R^{14} and R^{15}, which may be the same or different, is selected from hydrogen, (1-6C)alkyl, amino, (1-6C)alkylamino and di-[(1-6C)alkyl]amino, and Q^5 is selected from (3-7C)cycloalkylene and (3-7C)cycloalkenylene,

and wherein any CH_2 or CH_3 group within an X^2 group, optionally bears on each said CH_2 or CH_3 group one or more halogeno or (1-6C)alkyl substituents or a substituent selected from hydroxy, cyano, amino, (1-6C)alkoxy, (1-6C)alkylamino and di-[(1-6C)alkyl]amino;

Z is selected from hydroxy, amino, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxy, (1-6C)alkylsulfonyl, (1-6C)alkanesulfonylamino, N-(1-6C)alkyl-(1-6C)alkanesulfonylamino and a group of the formula:

$$Q^6\text{-}X^9\text{-}$$

wherein X^9 is a direct bond or is selected from O, $N(R^{16})$, SO_2 and $SO_2N(R^{16})$, wherein R^{16} is hydrogen or (1-6C)alkyl, and Q^6 is (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-4C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-4C)alkyl, heterocyclyl or heterocyclyl-(1-4C)alkyl;

provided that when X^9 is a direct bond, Q^6 is heterocyclyl,

and provided that when m, p and q are all 0, then Z is heterocyclyl,

and wherein adjacent carbon atoms in any (2-6C)alkylene chain within a Z substituent are optionally separated by the insertion into the chain of a group selected from O, S, SO, SO_2, $N(R^{17})$, CO, -C=C- and -C≡C- wherein R^{17} is hydrogen or (1-6C)alkyl,

and wherein and wherein any CH_2 or CH_3 group within any Z group, other than a CH_2 group within a heterocyclyl ring, optionally bears on each said CH_2 or CH_3 group one or more halogeno or (1-6C)alkyl substituents or a substituent selected from hydroxy, cyano, amino, carboxy, carbamoyl, sulfamoyl, (2-6C)alkenyl, (2-6C)alkynyl, (1-6C)alkoxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulfamoyl, N,N-di-[(1-6C)alkyl]sulfamoyl, (1-6C)alkanesulfonylamino and N-(1-6C)alkyl-(1-6C)alkanesulfonylamino,

and wherein any heterocyclyl group within a Z substituent optionally bears one or more substitutents which may be the same or different, selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, formyl, mercapto, (1-6C)alkyl, (2-6C)alkenyl, (2-6C)alkynyl, (1-6C)alkoxy, (1-6C)alkylthio, (1-6C)alkylsulfinyl, (1-6C)alkylsulfonyl,

(1-6C)alkylamino, di-[(1-6C)alkyl]amino, (2-6C)alkanoyl, (2-6C)alkanoyloxy and from a group of the formula:

$$-X^{10}-R^{18}$$

wherein X^{10} is a direct bond or is selected from O, CO, SO_2 and $N(R^{19})$, wherein R^{19} is hydrogen or (1-4C)alkyl, and R^{18} is halogeno-(1-4C)alkyl, hydroxy-(1-4C)alkyl, (1-4C)alkoxy-(1-4C)alkyl, cyano-(1-4C)alkyl, amino-(1-4C)alkyl, N-(1-4C)alkylamino-(1-4C)alkyl and N,N-di-[(1-4C)alkyl]amino-(1-4C)alkyl;

provided that:

when the 4-anilino group in Formula I is 4-bromo-2-fluoroanilino or 4-chloro-2-fluoroanilino and R^1 is hydrogen or (1-3C)alkoxy, then a is 0 and Z is selected from hydroxy, amino, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxy, (1-6C)alkylsulfonyl, (1-6C)alkanesulfonylamino, N-(1-6C)alkyl-(1-6C)alkanesulfonylamino, and a group of the formula Q^6-X^9-;

or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof.

2. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 wherein:

$\mathbf{R^1}$ is selected from hydrogen, hydroxy, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, or from a group of the formula :

$$Q^2-X^3-$$

wherein X^3 is a direct bond or is O, and Q^2 is heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein adjacent carbon atoms in any (2-6C)alkylene chain within a R^1 substituent are optionally separated by the insertion into the chain of a group selected from O, $N(R^3)$, $CON(R^3)$, $N(R^3)CO$, CH=CH and C≡C wherein R^3 is hydrogen or (1-6C)alkyl,

and wherein any CH_2=CH- or HC≡C- group within a R^1 substituent optionally bears at the terminal CH_2= or HC≡ position a substituent selected from carbamoyl, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl and di-[(1-6C)alkyl]amino-(1-6C)alkyl

and wherein any CH_2 or CH_3 group within a R^1 substituent, other than a CH_2 group within a heterocyclyl ring, optionally bears on each said CH_2 or CH_3 group one or more halogeno or (1-6C)alkyl substituents or a substituent selected from hydroxy, amino, cyano, carbamoyl, (1-6C)alkoxy, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, N-(1-6C)alkylcarbamoyl and N,N-di-[(1-6C)alkyl]carbamoyl, or from a group of the formula :

$$-X^5-Q^4$$

wherein X^5 is a direct bond or is selected from O, $N(R^5)$, $CON(R^5)$, $N(R^5)CO$ and $C(R^5)_2O$, wherein R^5 is hydrogen or (1-6C)alkyl, and Q^4 is heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from halogeno, trifluoromethyl, hydroxy, amino, carbamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkylsulfonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, N-(1-6C)alkylcarbamoyl, N,N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, or from a group of the formula:

$$-X^6-R^6$$

wherein X^6 is a direct bond or is selected from O and $N(R^7)$, wherein R^7 is hydrogen or (1-6C)alkyl, and R^6 is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkoxy-(1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl and di-[(1-6C)alkyl]amino-(1-6C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1 or 2 oxo substituents.

3. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 wherein:

$\mathbf{R^1}$ is selected from hydrogen, hydroxy, (1-4C)alkoxy, hydroxy-(2-4C)alkoxy, (1-3C)alkoxy-(2-4C)alkoxy or from a group of the formula :

$$Q^2-X^3-$$

wherein X^3 is O, and Q^2 is azetidin-1-yl-(2-4C)alkyl, pyrrolidin-1-yl-(2-4C)alkyl, piperidino-(2-4C)alkyl, piperazino-(2-4C)alkyl or morpholino-(2-4C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from halogeno, hydroxy, amino, (1-4C)alkyl, (1-4C)alkoxy, (1-4C)alkylsulfonyl, (1-4C)alkylamino, di-[(1-4C)alkyl]amino, and (2-4C)alkanoyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1 oxo substituent.

4. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 wherein $\mathbf{R^1}$ is (1-3C)alkoxy.

5. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

b is 1, 2 or 3; and

each $\mathbf{R^2}$, which may be the same or different, is selected from fluoro, chloro, bromo, (1-4C)alkyl, (2-4C)alkenyl and (2-4C)alkynyl.

6. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

b is 1, 2 or 3 and one $\mathbf{R^2}$ is at the meta (3-) position on the anilino group in Formula 1 and is halogeno.

7. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of claims 1 to 4 wherein the anilino group at the 4-position on the quinazoline ring in the compound of Formula I is selected from 3-chloro-2-bromoanilino, 3-chloro-2-fluoroanilino, 3-ethynylanilino and 3-bromoanilino.

8. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

$\mathbf{X^2}$ is a group of the formula $-(CR^{12}R^{13})_q-(CR^{12aa}R^{13aa})-$, wherein

q is 1, 2 or 3,

each of R^{12}, R^{13} and R^{13aa}, which may be the same or different, is selected from hydrogen and (1-6C)alkyl,

R^{12aa} is selected from amino, (1-6C)alkylamino and di-[(1-6C)alkyl]amino,

and wherein any CH_2 or CH_3 group within an X^2 group, optionally bears on each said CH_2 or CH_3 group one or more halogeno substituents,

and wherein any CH_2 group which is attached to 2 carbon atoms or any CH_3 group which is attached to a carbon atom within a X^2 substituent optionally bears on each said CH_2 or CH_3 group a substituent selected from hydroxy, amino, (1-6C)alkoxy, (1-6C)alkylamino and di-[(1-6C)alkyl]amino.

9. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of claims 1 to 7 wherein:

X^2 is a group of the formula $-(CR^{12}R^{13})_q-$, wherein

q is 1, 2, 3 or 4,

each of R^{12} and R^{13}, which may be the same or different, is selected from hydrogen and (1-6C)alkyl, provided that at least one of the R^{12} or R^{13} groups in X^2 is (1-6C)alkyl,

and wherein any CH_2 or CH_3 group within an X^2 group, optionally bears on each said CH_2 or CH_3 group one or more halogeno substituents,

and wherein any CH_2 group which is attached to 2 carbon atoms or any CH_3 group which is attached to a carbon atom within a X^2 substituent optionally bears on each said CH_2 or CH_3 group a substituent selected from hydroxy, and (1-6C)alkoxy.

10. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of claims 1 to 7 wherein:

X^2 is selected from a group of the formula $-CH_2-$, $-CH_2CH_2-$, $-(CHR^{12a})-$, $-(CHR^{12a}CH_2)-$, $-(C(R^{12a})_2CH_2)-$, $-(CH_2C(R^{12a})_2)-$ and $-(CH_2CHR^{12a})-$,

wherein each R^{12a}, which may be the same or different, is (1-4C)alkyl.

11. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

Z is selected from hydroxy, amino, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxy, hydroxy-(2-6C)alkoxy, (1-4C)alkoxy-(2-6C)alkoxy and a group of the formula:

$$Q^6\text{-}X^9\text{-}$$

wherein X^9 is a direct bond and Q^6 is heterocyclyl,

and provided that when m, p and q are all 0, then Z is heterocyclyl linked to X^1 by a ring carbon atom,

and wherein any heterocyclyl group in Z is selected from azetidinyl, tetrahydrofuranyl, 1,3-dioxolanyl, tetrahydropyranyl, 1,4-dioxanyl, oxepanyl, pyrrolidinyl, morpholinyl, piperidinyl, homopiperidinyl, piperazinyl and homopiperazinyl,

and wherein and wherein any CH_2 or CH_3 group within a Z group, other than a CH_2 group within a heterocyclyl ring, optionally bears on each said CH_2 or CH_3 group one or

more halogeno or (1-4C)alkyl substituents or a substituent selected from hydroxy and (1-4C)alkoxy,

and wherein any heterocyclyl group within a Z substituent optionally bears one or more substitutents which may be the same or different, selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, formyl, (1-4C)alkyl, (1-4C)alkoxy, (1-4C)alkylsulfonyl, (1-4C)alkylamino, di-[(1-4C)alkyl]amino and (2-4C)alkanoyl.

12. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

Z is hydroxy or (1-4C)alkoxy; and

the sum of m +p+q is at least 1.

13. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of claims 1 to 7 wherein:

$\mathbf{X^2}$ is selected from a group of the formula $-CH_2-$, $-CH_2CH_2-$, $-(CHR^{12a})-$, $-(CHR^{12a}CH_2)-$, $-(C(R^{12a})_2CH_2)-$, $-(CH_2C(R^{12a})_2)-$ and $-(CH_2CHR^{12a})-$,

wherein each R^{12a}, which may be the same or different, is (1-4C)alkyl; and

Z is hydroxy or (1-4C)alkoxy.

14. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein:

$\mathbf{Q^1}$ is piperidin-4-yl;

a is 0 or 1; and

W is selected from halogeno, hydroxy, (1-3C)alkyl and (1-3C)alkoxy.

15. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of the preceding claims wherein $\mathbf{X^1}$ is CO.

16. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 wherein:

$\mathbf{R^1}$ is selected from hydrogen, (1-6C)alkoxy, cyclopropyl-(1-4C)alkoxy, cyclobutyl-(1-4C)alkoxy, cyclopentyl-(1-4C)alkoxy, cyclohexyl-(1-6C)alkoxy, tetrahydrofuranyl-(1-4C)alkoxy and tetrahydropyranyl-(1-4C)alkoxy,

and wherein any CH_2 or CH_3 group within a R^1 substituent optionally bears on each said CH_2 or CH_3 group one or more halogeno substituents, or a substituent selected from hydroxy and (1-4C)alkoxy;

b is 1, 2 or 3;

each R^2, which may be the same or different, is selected from halogeno, cyano, hydroxy, trifluoromethyl, (1-4C)alkyl, (2-4C)alkenyl, (2-4C)alkynyl and (1-4C)alkoxy;

$\mathbf{Q^1}$ is piperidin-4-yl;

a is 0, 1 or 2;

each W, which may be the same or different, is selected from halogeno, trifluoromethyl, hydroxy, oxo, (1-6C)alkyl, (1-6C)alkoxy, and from a group of the formula:

$$-X^8-R^{10}$$

wherein X^8 is a direct bond or is O, and R^{10} is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl or (1-6C)alkoxy-(1-6C)alkyl;

$\mathbf{X^1}$ is CO;

$\mathbf{X^2}$ is a group selected from (3-6C)cycloalkylene, $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-(CR^{12}R^{13})-$, $-(CR^{12}R^{13}CH_2)-$ and $-(CH_2CR^{12}R^{13})-$,

wherein each of R^{12} and R^{13}, which may be the same or different, is selected from hydrogen, (1-4C)alkyl, hydroxy-(1-4C)alkyl, and (1-3C)alkoxy-(1-4C)alkyl, provided that R^{12} and R^{13} are not both hydrogen,

and wherein any CH_2 group within a (3-6C)cycloalkylene group in X^2, optionally bears on each said CH_2 or group one or more (1-4C)alkyl substituents or a substituent selected from hydroxy, (1-4C)alkoxy, hydroxy-(1-4C)alkyl, and (1-3C)alkoxy-(1-4C)alkyl; and

Z is selected from hydroxy and (1-4C)alkoxy;

provided that:

when the 4-anilino group in Formula I is 4-bromo-2-fluoroanilino or 4-chloro-2-fluoroanilino, R^1 is hydrogen or (1-3C)alkoxy, and X^1 is CO, then a is 0.

17. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 wherein:

the 4-anilino group on the quinazoline ring in Formula I is selected from 3-chloro-4-fluoroanilino, 3-bromo-2-fluoroanilino, 3-chloro-2-fluoroanilino, 3-bromoanilino and 3-ethynylanilino;

R^1 is selected from (1-4C)alkoxy, hydroxy-(2-4C)alkoxy, (1-3C)alkoxy-(2-4C)alkoxy or from a group of the formula:

$$Q^2-X^3-$$

wherein X^3 is O, and Q^2 is azetidin-1-yl-(2-4C)alkyl, pyrrolidin-1-yl-(2-4C)alkyl, piperidino-(2-4C)alkyl, piperazino-(2-4C)alkyl or morpholino-(2-4C)alkyl,

and wherein any heterocyclyl group within a substituent on R^1 optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from halogeno, hydroxy, amino, (1-4C)alkyl, (1-4C)alkoxy, (1-4C)alkylamino and di-[(1-4C)alkyl]amino;

Z is hydroxy or (1-4C)alkoxy;

Q^1 is piperidin-4-yl;

a is 0 or 1;

each W, which may be the same or different is selected from hydroxy, (1-3C)alkyl and (1-3C)alkoxy;

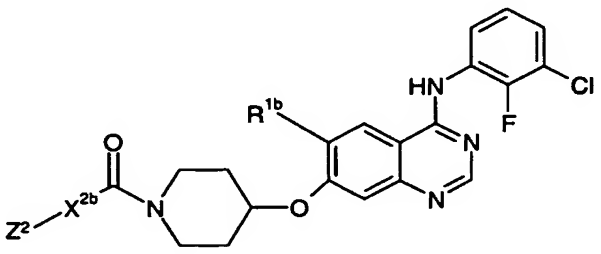
X^1 is CO;

X^2 is selected from a group of the formula $-(CHR^{12a})-$ and $-(CH_2CHR^{12b})-$,

wherein R^{12a} is (1-4C)alkyl,

and wherein R^{12b} is selected from amino, (1-4C)alkylamino and di-[(1-4C)alkyl]-amino.

18. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to claim 1 of the Formula Id:



Id

wherein:

$\mathbb{R}^{1b}$ is (1-4C)alkoxy,

and wherein any CH_2 or CH_3 group within a R^{1b} substituent optionally bears on each said CH_2 or CH_3 group one or more halogeno substituents, or any CH_2 or CH_3 group within a R^1 which is not attached to an oxygen atom optionally bears on each said CH_2 or CH_3 group a substituent selected from hydroxy and (1-3C)alkoxy;

$\mathbf{X^{2b}}$ is selected from a group of the formula $-CH_2-$, $-CH_2CH_2-$, $-(CHR^{12})-$, $-(CHR^{12}CH_2)-$ and $-(CH_2CHR^{12})-$

wherein R^{12} is selected from (1-3C)alkyl, hydroxy-(1-3C)alkyl and (1-3C)alkoxy-(1-3C)alkyl; and

$\mathbf{Z^2}$ is selected from hydroxy, (1-3C)alkoxy, hydroxy-(2-3C)alkoxy, (1-3C)alkoxy-(2-3C)alkoxy, tetrahydrofuran-2-yl, tetrahydrofuran-3-yl, 1,3-dioxolanyl, tetrahydropyranyl and 1,4-dioxanyl;

and wherein any heterocyclyl group within Z^2-X^{2b} optionally bears 1 or 2 substituents, which may be the same or different, selected from fluoro, chloro, hydroxy, (1-3C)alkyl, (1-3C)alkoxy and (2-3C)alkanoyl;

or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof.

19. A quinazoline derivative according to claim 18, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, wherein Z^2 is hydroxy and R^{12} is (1-3C)alkyl;

20. A quinazoline derivative according to claim 18, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, wherein:

$\mathbf{R^{1b}}$ is (1-3C)alkoxy; and

the group $\mathbf{Z^2}$-$\mathbf{X^{2b}}$- is selected from hydroxymethyl, methoxymethyl, (S)-1-hydroxyethyl, (R)-1-hydroxyethyl, (S)-1-methoxyethyl and (R)-1-methoxyethyl.

21. A quinazoline derivative of the Formula I according to claim 1 selected from:

N-(3-chloro-2-fluorophenyl)-7-({1-[(dimethylamino)acetyl]piperidin-4-yl}oxy)-6-methoxyquinazolin-4-amine;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-({1-[(2-methoxyethoxy)acetyl]piperidin-4-yl}oxy)quinazolin-4-amine;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-{[1-(methoxyacetyl)piperidin-4-yl]oxy}quinazolin-4-amine;

2-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2-oxoethanol;

N-(3-chloro-2-fluorophenyl)-7-{[1-(ethoxyacetyl)piperidin-4-yl]oxy}-6-methoxyquinazolin-4-amine;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-{[1-(3-methoxypropanoyl)piperidin-4-yl]oxy}quinazolin-4-amine;

3-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-3-oxopropan-1-ol;

(2*S*)-1-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

(2*S*,3*S*)-1-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-3-methyl-1-oxopentan-2-ol;

4-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2-methyl-4-oxobutan-2-ol;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-{[1-(tetrahydrofuran-2-ylcarbonyl)piperidin-4-yl]oxy}quinazolin-4-amine;

3-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2,2-dimethyl-3-oxopropan-1-ol;

(3*R*,5*S*)-1-acetyl-5-{[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]carbonyl}pyrrolidin-3-ol; and

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-({1-[(4-methylpiperazin-1-yl)acetyl]piperidin-4-yl}oxy)quinazolin-4-amine;

or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof.

22. A quinazoline derivative of the Formula I selected from:

N-(3-Chloro-2-fluorophenyl)-6-methoxy-7-{[1-(methoxyacetyl)piperidin-4-yl]oxy}quinazolin-4-amine;

2-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2-oxoethanol;

N-(3-chloro-2-fluorophenyl)-7-{[1-(ethoxyacetyl)piperidin-4-yl]oxy}-6-methoxyquinazolin-4-amine;

(2*S*)-1-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

3-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2,2-dimethyl-3-oxopropan-1-ol;

(2*S*)-1-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-3,3-dimethyl-1-oxobutan-2-ol;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-{[1-(1-methyl-L-prolyl)piperidin-4-yl]oxy}quinazolin-4-amine;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-({1-[(2*S*)-tetrahydrofuran-2-ylcarbonyl]piperidin-4-yl}oxy)quinazolin-4-amine;

(2*R*)-1-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-({1-[(2*S*)-2-methoxypropanoyl]piperidin-4-yl}oxy)quinazolin-4-amine;

N-(3-chloro-2-fluorophenyl)-6-methoxy-7-({1-[(2R)-2-methoxypropanoyl]piperidin-4-yl}oxy)quinazolin-4-amine;

(2R)-3-[4-({4-[3-chloro-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-2-(dimethylamino)-3-oxopropan-1-ol;

(2*S*)-1-[4-({4-[(3-chloro-4-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

(2*S*)-1-[4-({4-[3-bromoanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

(2*S*)-1-[4-({4-[3-bromo-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

(2*R*)-1-[4-({4-[3-bromo-2-fluoroanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol; and

(2*R*)-1-[4-({4-[3-bromoanilino]-6-methoxyquinazolin-7-yl}oxy)piperidin-1-yl]-1-oxopropan-2-ol;

or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof.

23. A quinazoline derivative of the Formula I according to any one of the preceding claims, or a pharmaceutically acceptable salt thereof.

24. A pharmaceutical composition which comprises a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester

thereof, according to any one of the preceding claims, in association with a pharmaceutically acceptable diluent or carrier.

25. A quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, according to any one of claims 1 to 23, for use as a medicament.

26. Use of a quinazoline derivative of the Formula I, a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23 in the manufacture of a medicament for use in the production of an anti-proliferative effect in a warm-blooded animal such as a human.

27. Use of a quinazoline derivative of the Formula I, a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23 in the manufacture of a medicament for use in the prevention or treatment of those tumours which are sensitive to inhibition of EGFR tyrosine kinases, that are involved in the signal transduction steps which lead to the proliferation of tumour cells.

28. Use of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23 in the manufacture of a medicament for use in providing a selective EGFR tyrosine kinase inhibitory effect in a warm-blooded animal such as a human.

29. Use of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23 in the manufacture of a medicament for use in the treatment of a cancer in a warm-blooded animal such as a human.

30. A method for producing an anti-proliferative effect in a warm-blooded animal, such as a human, in need of such treatment which comprises administering to said animal an effective amount of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23.

31. A method for the prevention or treatment of those tumours in a warm-blooded animal such as a human which are sensitive to inhibition of EGFR tyrosine kinases, that are involved in the signal transduction steps which lead to the proliferation and/or survival of tumour cells which comprises administering to said animal an effective amount of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23.

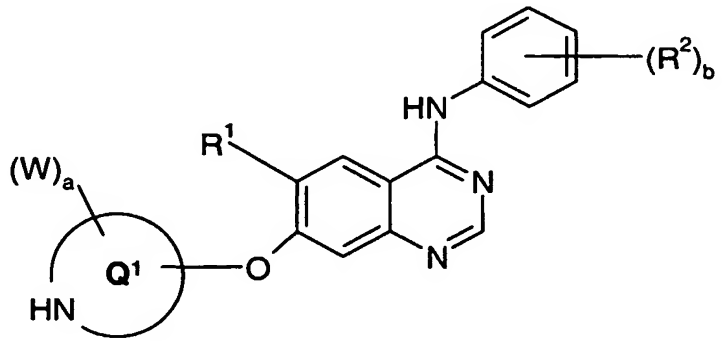
32. A method for providing a selective EGFR tyrosine kinase inhibitory effect in a warm-blooded animal such as a human which comprises administering to said animal an effective amount of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23.

33. A method for treating a cancer in a warm-blooded animal, such as a human, in need of such treatment, which comprises administering to said animal an effective amount of a quinazoline derivative of the Formula I, or a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester thereof, as defined in any one of claims 1 to 23.

34. A process for the preparation of a quinazoline derivative of the Formula I as defined in Claim 1 which comprises:

Process (a):

for the preparation of compounds of the Formula I wherein X^1 is CO, the coupling of a quinazoline of the formula **II** or a salt thereof:



II

wherein R^1, R^2, W, a, b and Q^1 are as defined in claim 1,except that any functional group is protected if necessary, with an acid of the formula III, or a reactive derivative

thereof:

$$Z\text{-}X^2\text{-}COOH$$

III

wherein Z and X^2 are as defined in claim 1, except that any functional group is protected if necessary;

or

Process (b) the reaction of a quinazoline of the formula **II** or a salt thereof, as defined in relation to Process (a), with a compound of the formula **IV**:

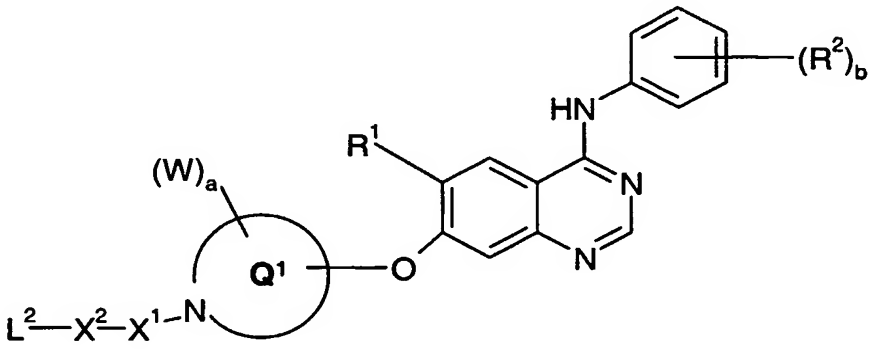
$$Z\text{-}X^2\text{-}X^1\text{-}L^1$$

IV

wherein L^1 is a displaceable group and Z, X^1 and X^2 are as defined in claim 1, except that any functional group is protected if necessary;

or

Process (c) for the preparation of those quinazoline derivatives of the Formula I wherein Z is linked to X^2 by nitrogen, the reaction of a compound of the formula **V**:



V

wherein L^2 is a displaceable group and R^1, R^2, W, X^1, X^2, a, b and Q^1 are as defined in claim 1, except that any functional group is protected if necessary, with a compound of the formula ZH, wherein Z is as hereinbefore defined, except that any functional group is protected if necessary; or

Process (d)

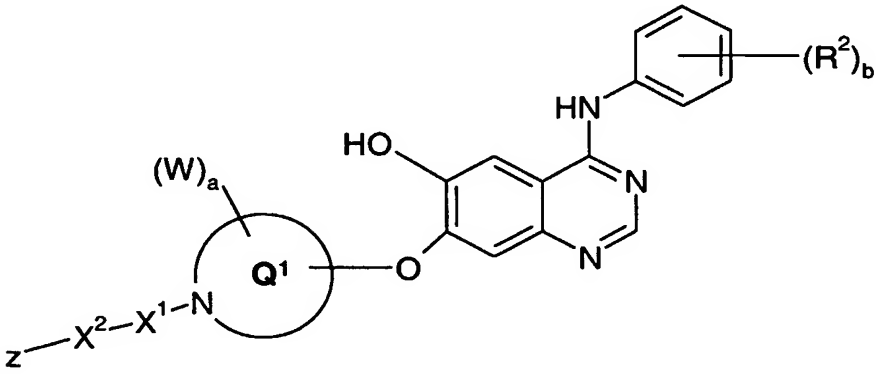
for the preparation of those quinazoline derivatives which carry a mono- or di-(1-6C)alkylamino group, the reductive amination of the corresponding quinazoline derivative of the Formula I which contains an N-H group using formaldehyde or a (2-6C)alkanolaldehyde; or

Process (e)

for the preparation of those quinazoline derivatives of the Formula I wherein R^1 is hydroxy, the cleavage of a quinazoline derivative of the Formula I wherein R^1 is a (1-6C)alkoxy group; or

Process (f)

for the preparation of those quinazoline derivatives of the Formula I wherein R^1 is linked to the quinazoline ring by an oxygen atom, by coupling a compound of the Formula **VI:**



VI

wherein R^2, W, X^1, X^2, Z, a, b and are as defined in claim 1 except that any functional group is protected if necessary, with a compound of the formula $R^{1'}OH$, wherein the group $R^{1'}O$ is one of the oxygen linked groups as defined for R^1 in claim 1, except that any functional group is protected if necessary;

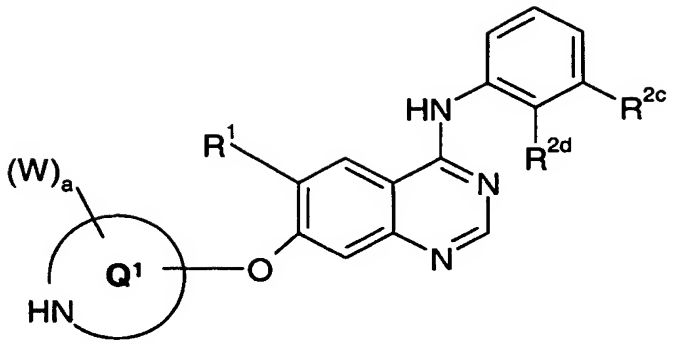
and thereafter, if necessary (in any order):

(i) converting a quinazoline derivative of the Formula I into another quinazoline derivative of the Formula I;

(ii) removing any protecting group that is present by conventional means; and

(iii) forming a pharmaceutically acceptable salt, or a pharmaceutically acceptable ester of the quinazoline derivative of the Formula I.

35. A quinazoline derivative of the Formula **II**:



II

wherein:

R^1, W, Q^1 and a are as defined in claim 1; and

R^{2c} and R^{2d}, which may be the same or different are halogeno;

or a salt thereof.